To: Alexander, Shanna[Alexander.Shanna@epa.gov]; Richards, Jon M.[Richards.Jon@epa.gov]; Amoroso,

Cathy[Amoroso.Cathy@epa.gov]; Frederick, Tim[Frederick.Tim@epa.gov]

Cc: Adams, Glenn[Adams.Glenn@epa.gov]

From: Froede, Carl[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=97093A3E34204AFA9DF1A0FD66A5CB38-FROEDE, CARL]

Sent: Mon 3/29/2021 4:09:05 PM (UTC)
Subject: RE: ORR DRAT team items

Good afternoon everyone,

I will coordinate any response back to DOE through Cathy (EIT Mbr) and the DRAT Project team (me).

As of now, we await DOE's decision about adding TDEC's six radionuclides for fish tissue analysis.

Stay tuned,

Carl

From: Alexander, Shanna < Alexander. Shanna@epa.gov>

Sent: Friday, March 26, 2021 1:58 PM

To: Richards, Jon M. <Richards.Jon@epa.gov>; Amoroso, Cathy <Amoroso.Cathy@epa.gov>; Froede, Carl <Froede.Carl@epa.gov>;

Frederick, Tim <Frederick.Tim@epa.gov>
Cc: Adams, Glenn <Adams.Glenn@epa.gov>

Subject: RE: ORR DRAT team items

I agree with Jon on this. As I stated during the call, I am okay with the rad list as presented. The only question I had which I raised in an earlier email is why Cs-137 wasn't highlighted. I agree with all of the others that were. I do think that all rads that were analyzed in surface water should also be analyzed in fish tissue to assess for cumulative effects.

Shanna

From: Richards, Jon M. <Richards.Jon@epa.gov>

Sent: Friday, March 26, 2021 1:52 PM

To: Amoroso, Cathy < Amoroso. Cathy@epa.gov >; Froede, Carl < Froede. Carl@epa.gov >; Alexander, Shanna

<<u>Alexander.Shanna@epa.gov</u>>; Frederick, Tim <<u>Frederick.Tim@epa.gov</u>>

Cc: Adams, Glenn < Adams. Glenn@epa.gov>

Subject: RE: ORR DRAT team items

Since Carl still rpm for the landfills I'd recommend he compile any of our comments

And thx for your careful insight on this, i

And I remember Andy's and TDEC's insistence on more rads.. I usually let DOE answer this, but only 4-6 key rads, which is why I

asked if all would need to be analyzed anytime there's analysis or a subset

As DOE will push back due to costs...

Jon Richards
Regional Radiation Expert & RPM
US EPA R4, SEMD
Richards.jon@epa.gov
404-431-1340

From: Amoroso, Cathy < Amoroso. Cathy@epa.gov>

Sent: Friday, March 26, 2021 1:30 PM

To: Froede, Carl <Froede.Carl@epa.gov>; Richards, Jon M. <Richards.Jon@epa.gov>; Alexander, Shanna

<a>Alexander.Shanna@epa.gov>; Frederick, Tim < Frederick.Tim@epa.gov>

Cc: Adams, Glenn < <u>Adams.Glenn@epa.gov</u>> **Subject:** ORR DRAT team items

Hello,

Thanks for your efforts with the ORR rad discharge issue.

Attached is the is a highlighted version of the Administrator's decision and my "analysis" of the dilution issue (which does not include ORC or upper management input).

I think the last DRAT meeting was good.

We owe the team EPA's comments/concurrence with the list of rad COCs for each landfill. Who is going to compile our comments (if any) and communicate back to the team? Jon? For your consideration, I've attached a document from Andy Binford (retired, formerly with TDEC) listing the radionuclides he thinks are associated with each landfill. Not sure if that changes our opinion. The PA/CA also includes a list of radionuclides that DOE projects will be associated with the EMDF, so may be worth checking that, too.

Thank you,

Cathy Amoroso, Chief Restoration & DOE Coordination Section Superfund & Emergency Management Division U.S. EPA, Region 4 404-295-6758